

Supermarket checkout simulator

OPERATIVE PART ONLY

EDUCATIONAL OBJECTIVES

- Understanding, putting into service, getting started and setting of the system
- Making different wirings and functioning tests
- Illustration and visualization of the result of a PLC program

USER'S MANUAL + PW

Proposed Practical Works

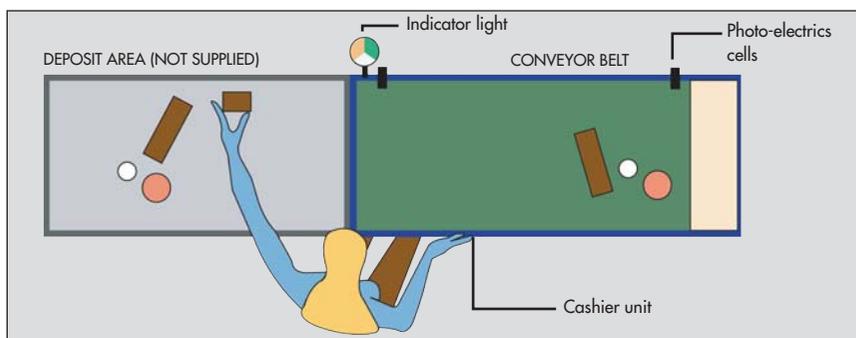
- Studying and locating of the different components
- Wiring of cells, light signal tower and gearmotor
- Making different wirings corresponding to various operating scenarios of the system



Features of the basement

- Frame on wheels
- Dimensions : 1600 x 650 x 1150mm (Height without indicator light)
- Weight : 60kg

ref. TAPIX



TAPIX is a conveyor belt for a cash register with the same features as the ones you would find in a supermarket. It comprises a conveyor belt driven by a gear motor, a control unit used by the cashier, an indicator light showing the status of the cash till and start and end of belt sensors.

The TAPIX system will only operate once the console has been connected to an external electrical cabinet.

MIMIC CONSOLE ALLOWING ELECTRICAL CONNECTION

- 1 HARTING® rapid connector (on the console) for connecting sensors, the cashier unit and the status indicator light.
- 1 set of safety terminals (on the console) bringing together the wiring for the motor's terminal board.
- This area can take a HARTING® rapid connection interface if the user does not have any electrical measurements to take from the motor.

CASHIER UNIT CONNECTED TO THE CONSOLE

It comprises all of the various controls that the cashier requires.

- "Till open" push-button
- "Last customer" push-button
- "Information request" push-button
- 3-position switch:
 - (1) Forced belt operation:
The belt will continue to move forwards.
 - (2) Automatic operation of belt:
The belt will move forwards depending on the objects that are placed on it
 - (3) Switch off belt

STATUS INDICATOR LIGHT CONNECTED TO THE CONSOLE

Indicates the status of the till to customers

- Green = till open
- Orange = last customer
- White = Call

PHOTO-ELECTRIC CELLS CONNECTED TO THE CONSOLE

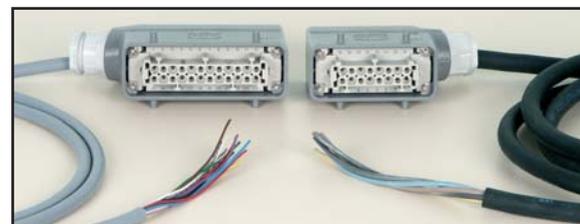
- Placed at the start and end of the belt, they detect
 - the presence of an item on the belt, which in turn activates the belt
 - that items are building up at the end of the belt, which in turn shuts down the belt
- These cells are of the NO, dry contact output type

GEAR MOTOR

Three-phase 230/380V. The motor's terminal board, which protrudes onto the console, enables the user to add an ammeter or a wattmeter in order to measure the current and power.

SET OF CABLES

Set of two 3-metre-long cables supplied with TAPIX



MODEL WITH TEST CABINET

These versions are identical to TAPIX, only the connection console is replaced by a control panel and a test cabinet. The setting up of the grid is immediate.

It's an autonomous system.

4 Harting® connectors connect the grid to the test cabinet end the control panel. The right panel of the test cabinet is equipped with the buttons and the indicator lights necessary to the startup of the student's grid.



ref. TAPIX-ARM-GD

ref. TAPIX-CAB model with wired grid

FEATURES OF THE POWER CONSOLE

- Console which is used for safe testing and supplies the three-phase and 24V power.
- Circuit breaker, in front of the power source
- General residual current circuit breaker protection.
- General emergency stop and Start/Stop
- 2 circuit breakers for protecting the three-phase and 24V power supply
- Cabinet door safety contact control.

FEATURES OF THE TEST CABINET

- 800 x 600 x 250mm steel cabinet
- Plate on door with actuators and control lamps wired to the HARTING® connector.
- Free spaces for the addition of control accessories DIAM 22.
- Rapid hanging and connection of a grid no bigger than 750 x 550mm.
- Door safety contact
(power to the cabinet is cut off automatically if the door is opened)
- 4 fixed connectors on grid, to be wired by students
- 4 rapid connection jacks to the sensors, controls and motor.

KEY-OPERATED DOOR OVERRIDE

- Allows the live cabinet to be used with the door open if the switch has been activated. Operates with a different key to the No.455.

MODEL WITH TEST CABINET AND MONITORING



Some versions as TAPIX-ARM-GD. It's an autonomous system.

USER'S MANUAL + SUPERVISION PW		
REF.	TAPIX-S	TAPIX-S-T6
PLC programming software	▪	▪
Software for touchscreen		▪
Software for PC	▪	
5.7 inch colour touchscreen		▪

MONITORING ON TAPIX SYSTEMS ENABLES THE USER

TO DISPLAY

- till open information
- last customer information
- information request details
- Presence of items on the belt
- The build-up of items on the belt
- Motor operation
- Mains power on 400V
- 24V mains power on

TO CONTROL

- till open information
- last customer information
- information request details
- the operation of the motor

You can also create your own monitoring.

5.7-INCH TOUCHSCREEN COLOUR

- High-visibility 256-colour TFT screen
- Communication, via RJ45 connector, for the TCP/IP ETHERNET network
- Adjustable contrast and brightness
- 24V DC/0.3A power supply
- Dim. 130 x 104 x 41mm

The systems which include a monitoring function are all supplied assembled and fully wired. Detailed instructions with full features of each component and tutorial supplied.

The monitoring is fully developed and operational.